

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No. : 10/687,845  
Inventor(s) : Antonella Pesce et al.  
Filed : October 17, 2003  
Art Unit : 1616  
Examiner : Ernst V. Arnold  
Docket No. : CM2526C  
Confirmation No. : 9579  
Customer No. : 27752  
Title : COOLING COMPOSITIONS

**APPEAL BRIEF**

Mail Stop Appeal Brief - Patents  
Commissioner for Patents  
P. O. Box 1450  
Alexandria, VA 22313-1450

This Brief is filed pursuant to the appeal from the decision communicated in the Office Action mailed on July 18, 2008. A timely Notice of Appeal was filed on October 15, 2008.

**REAL PARTY IN INTEREST**

The real party in interest is The Procter & Gamble Company of Cincinnati, Ohio.

**RELATED APPEALS AND INTERFERENCES**

There are no known related appeals, interferences, or judicial proceedings.

**STATUS OF CLAIMS**

Claims 10-17, 19, and 20 are rejected in the present application and are appealed. Claims 1-9 and 18 were previously canceled by Appellants.

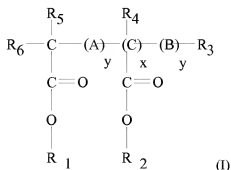
A complete copy of the appealed claims is set forth in the Claims Appendix attached herein.

**STATUS OF AMENDMENTS**

No amendment was filed subsequent to the most recent final rejection.

# SUMMARY OF CLAIMED SUBJECT MATTER

The presently claimed invention is directed to a hygiene article comprising a composition comprising a cooling agent together with a certain ester derivative(s). *See, e.g.*, page 5, line 34 to page 6, line 2. The ester derivative has the following formula:



wherein R<sub>1</sub> and R<sub>2</sub> are independently an alkyl, alkenyl, arylalkyl, hydroxyalkyl, alkoxy groups of from about 2 to about 24 carbon atoms, hydroxy group or hydrogen group; R<sub>3</sub>, R<sub>4</sub>, R<sub>5</sub>, and R<sub>6</sub> are independently an alkyl, alkenyl, arylalkyl, hydroxyalkyl, alkoxy groups of from about 1 to about 24 carbon atoms, hydroxy group or hydrogen group; A and B are independently a C<sub>1</sub>-C<sub>6</sub> linear or branched alkylene, alkyl, alkenylene, alkoxy, alkoxy, hydroxyalkylene, hydroxyalkyl groups; the values of x are independently from 0 to about 15; the values of y are independently 0 or 1. *See, e.g.*, page 20, line 15 to page 22, line 8. The hygienic article containing such a composition provides an immediate and long-lasting freshness sensation, while maintaining or even improving skin and/or mucosal membrane health. *See, e.g.*, page 32, lines 11-14, and the Abstract.

#### GROUND OF REJECTION TO BE REVIEWED ON APPEAL

Claims 10-17, 19, and 20 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Williams, US 6,506,958, in view of Schneider et al., US 4,583,980, and Furman, US 5,451,404.

Appellants acknowledge that Claims 10-17, 19, and 20 have also been rejected on the basis of obviousness-type double patenting. Appellants have offered to file terminal disclaimers, upon identification of otherwise patentable subject matter, to obviate the obviousness-type double patenting rejections. Appellants are therefore not requesting review of the obviousness-type double patenting rejections on appeal.

#### ARGUMENTS

Appellants respectfully submit that Claims 10-17, 19, and 20 are patentable over the cited references.

##### Rejection Under 35 USC §103(a) Over Williams in View of Schneider et al. and Furman

Claims 10-17, 19, and 20 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Williams (US 6,506,958), in view of Schneider et al. (US 4,583,980), and Furman (US 5,451,404). Appellants respectfully traverse this rejection and request that this rejection be reversed.

Appellants respectfully assert that the Office Action fails to establish a *prima facie* case of obviousness because there is no motivation to combine Williams with Schneider et al. and Furman. Appellants respectfully further assert that even if a *prima facie* case of obviousness is properly established, the references, as cited, teach away from the claims of the present application.

Appellants submit that there is no motivation to combine Williams with Schneider et al. and Furman for three reasons. First, Williams is to a signal tampon (see e.g. Title). Williams states that the indicator is designed to provide a sensory signal to the user that the capacity of the tampon is exhausted. (see e.g. Col. 1, Lines 9-12 and Col. 2, Lines 60-62). Williams further states that the indicator alerts the user that by-pass leakage is about to commence. (see e.g. Col. 2, Lines 10-15, Col. 3, Lines 10-12). In essence, the signal tampon of Williams provides a burst of sensation, or signal, to the user that user should

change her tampon. The signal would need to be intense enough such that signal alerts the wearer that she needs to immediately remove and replace the tampon. (see e.g. Col. 3, Lines 54-56).

Schneider et al., Col. 5, Lines 24-27 teach employing triethyl citrate to provide for long lasting odor suppression. Schneider et al., Col. 4, Lines 35-36 and Col. 5, Lines 17-23 report odor suppression by way of suppressing alkalization of urine for durations of 14 hours. Thus, Schneider et al. relates to sustained and long-term odor control.

One skilled in the art seeking to provide for long lasting comfort for hygienic articles would not be motivated to combine Williams, which teaches how to achieve a burst of sensation, with Schneider et al., which teaches a chemical substance to provide for sustained odor suppression by way of suppressing alkalization of urine for extended durations, because the utility for the references are at opposite ends of the spectrum in terms of the length of time over which each invention performs. One skilled in the art would not be motivated to combine a reference related to a tampon designed to provide a burst of sensation over a short period of time with a reference teaching long-term odor suppression. Williams desires a rapid impulse release whereas Schneider et al. desire a sustained odor suppression over a long period of time.

Second, modifying Williams, as taught by Schneider et al., would render Williams unsatisfactory for its intended purpose. Under *In re Gordon*, 733 F.2d 900 (Fed. Cir. 1984), if the proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification. As discussed above, the tampon in Williams is to provide a signal that the capacity of the tampon is exhausted. If the teaching of Schneider et al. is applied to the tampon of Williams, the signal from the tampon in Williams would be dampened. The lack of distinctness of a signal in the tampon might fail to provide to the wearer the immediate alert that by-pass leakage is about to occur which would make the tampon of Williams unsatisfactory for its intended purpose.

Third, the proposed modification or combination of Williams with Schneider et al. would change the principle of operation of Williams. Under *In re Ratti*, 270 F.2d 810 (CCPA 1959), if the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of

the references are not sufficient to render the claims *prima facie* obvious. As discussed above, the principle of operation of Williams is to provide a distinct signal that the capacity of the tampon is exhausted. Applying the teaching of Schneider et al. would dampen the signal provided by Williams. Thus, the principle of operation would change from providing a distinct alert, as in Williams, to providing for a weaker change in sensation to the user that the capacity of the tampon is exhausted if the teaching of Schneider et al. is followed.

Even if a *prima facie* case of obviousness is established, Appellants submit that Williams teaches away from making the modification of Schneider et al. Williams teaches that the signal tampon should provide an alert that the capacity of the tampon is exhausted, that by-pass leakage is about to occur, or that the user needs to immediately remove or replace the tampon. One skilled in the art considering Williams would understand that distinctness and intensity of the signal provides the benefit sought in Williams and would not seek to reduce the sensational impact by following the teaching of Schneider et al., which would lower the intensity of the signal provided to the user. Thus, Appellants submit that Williams teaches away from applying the odor suppression agent in Schneider et al. to the tampon in Williams.

Furthermore, Appellants have found that the combination of a cooling agent and certain ester derivatives provides an immediate and long-lasting freshness sensation. In contrast, Williams desires a signal tampon that provides a signal, such as a cold sensation, when the absorbent capacity of the tampon is exhausted. Therefore, Williams would not desire an immediate and long-lasting cooling sensation, such as that provided by the present invention.

Based on the above, Appellants submit that the Office Action fails to establish a *prima facie* case of obviousness against Claim 10 of the present application. Even if a *prima facie* case of obviousness is established, Appellants submit that the *prima facie* case of obviousness is rebutted because Williams teaches away from making the combination suggested in the Office Action. The Applicants submit that Claim 10 is allowable and respectfully request that Claim 10 be allowed.

Claims 11-17, 19, and 20 depend upon Claim 10. As discussed above, the Applicants submit that Claim 10 is allowable. Thus, the Applicants submit that Claims

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11-17, 19, and 20 are also allowable. The Applicants respectfully request that Claims 11-17, 19, and 20 be allowed.

SUMMARY

In view of all of the above, it is respectfully submitted that the rejection be reversed and that all the claims be allowed.

Respectfully submitted,  
THE PROCTER & GAMBLE COMPANY

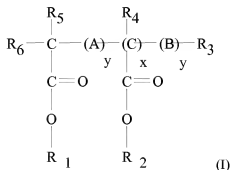
By / Jason J. Camp / \_\_\_\_\_  
Signature  
Jason J. Camp  
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Date: December 15, 2008

**Customer No. 27752**

# CLAIMS APPENDIX

10. A hygienic article comprising a composition comprising a cooling agent together with an ester derivative of the following formula:

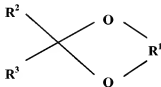


wherein R<sub>1</sub> and R<sub>2</sub> are independently an alkyl, alkenyl, arylalkyl, hydroxyalkyl, alkoxy groups of from about 2 to about 24 carbon atoms, hydroxy group or hydrogen group; R<sub>3</sub>, R<sub>4</sub>, R<sub>5</sub>, and R<sub>6</sub> are independently an alkyl, alkenyl, arylalkyl, hydroxyalkyl, alkoxy groups of from about 1 to about 24 carbon atoms, hydroxy group or hydrogen group; A and B are independently a C<sub>1</sub>-C<sub>6</sub> linear or branched alkylene, alkyl, alkenylene, alkoxy, hydroxyalkylene, hydroxyalkyl groups; the values of x are independently from 0 to about 15; the values of y are independently 0 or 1.

11. A hygienic article according to claim 10, wherein said hygienic article is a clothing, bandage, thermal pad, acne pad, cold pad, compress, surgical pad/dressing, protective bedding cover, gloves, socks, perspiration pad, shoe insole, shirt insert, animal litter, panty liner, feminine napkin, incontinent pad, diaper, tampon, interlabial pad, breast pad, dry or wet wipe or human or animal waste management device.
12. A hygienic article according to Claim 10, wherein said hygienic article is a disposable absorbent article, wherein said hygienic article comprises a topsheet containing the composition according to claim 10.

13. The hygienic article according to Claim 10, wherein the cooling agent is able to convey a freshness sensation, without the need to modify temperature of the skin/mucosal surface of the mammal body to which the composition is applied.
14. The hygienic article according to claim 13, wherein the cooling agent is selected from the group consisting of ketals, carboxamides, cyclohexyl derivatives, cyclohexanol derivatives, borneol, camphor, eucalyptol, methyl salicylate, tea tree oil, eucalyptus oil, peppermint oil and mixtures thereof.
15. The hygienic article according to claim 13, wherein the cooling agent is selected from the group consisting of:

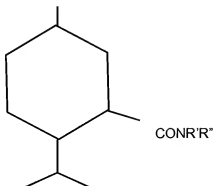
- a ketal according to the following formula:



in which R<sup>1</sup> represents a C<sub>2</sub>-C<sub>6</sub>-alkylene radical having at least 1, but not more than 3, hydroxyl group(s), preferably 1 hydroxyl group, and either R<sup>2</sup> and R<sup>3</sup> independently of one another represent C<sub>1</sub>-C<sub>10</sub>-alkyl which is optionally substituted by 1 to 3 radicals selected from the group comprising hydroxyl, amino and halogen (such as fluorine, chlorine, bromine or iodine), C<sub>5</sub>-C<sub>7</sub>-cycloalkyl, preferably cyclohexyl, C<sub>6</sub>-C<sub>12</sub>-aryl, preferably phenyl, with the proviso that the total of the C atoms of R<sup>2</sup> and R<sup>3</sup> is not less than 3, or R<sup>2</sup> and R<sup>3</sup> together represent an alkylene radical which, together with the carbon atom which carries the radicals R<sup>2</sup> and R<sup>3</sup>, forms a 5-7-membered ring, it being possible for this alkylene radical, in turn, to be substituted by C<sub>1</sub>-C<sub>6</sub>-alkyl groups, or mixtures thereof;

- or a carboxamide of the following formula:

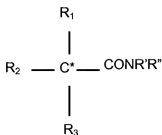




(a)

wherein R', when taken separately, is hydrogen or an aliphatic radical containing up to about 25 carbon atoms; R'' when taken separately is hydroxy, or an aliphatic radical containing up to about 25 carbon atoms, with the proviso that when R' is hydrogen R'' may also be an aryl radical of up to about 10 carbon atoms and selected from the group consisting of substituted phenyl, phenalkyl or substituted phenalkyl, naphthyl and substituted naphthyl, pyridyl; and R' and R'', when taken together with the nitrogen atom to which they are attached, represent a cyclic or heterocyclic group of up to about 25 carbon atoms, or mixtures thereof,

or (b)

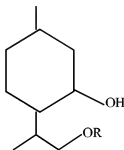


wherein R' and R'', when taken separately, are each hydrogen, C<sub>1</sub>-C<sub>5</sub> alkyl or C<sub>1</sub>-C<sub>8</sub> hydroxyalkyl and provide a total of no more than about 8 carbon atoms, with the proviso that when R' is hydrogen R'' may also be alkylcarboxyalkyl of up to 6 carbon atoms; R' and R'', when taken together, represent an alkylene group of up to

about 6 carbon atoms, the opposite ends of which group are attached to the amide nitrogen atom thereby to form a nitrogen heterocycle, the carbon chain of which may optionally be interrupted by oxygen; R<sub>1</sub> is hydrogen or C<sub>1</sub>-C<sub>5</sub> alkyl; and R<sub>2</sub> and R<sub>3</sub> are each C<sub>1</sub>-C<sub>5</sub> alkyl; with the provisos that (i) R<sub>1</sub>, R<sub>2</sub> and R<sub>3</sub> together provide a total of at least 5 carbon atoms, preferably from about 5-10 carbon atoms; and (ii) when R<sub>1</sub> is hydrogen, R<sub>2</sub> is C<sub>2</sub>-C<sub>5</sub> alkyl and R<sub>3</sub> is C<sub>3</sub>-C<sub>5</sub> alkyl and at least one of R<sub>2</sub> and R<sub>3</sub> is branched, preferably in an alpha or beta position relative to the carbon atom marked (\*) in the formula, or a mixture thereof;

- or a cyclohexanol derivative according to the following general formula:

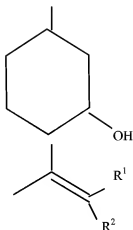
(1)



wherein R represents a linear or branched alkyl group having about 1 to about 5 carbon atoms, or mixtures thereof,

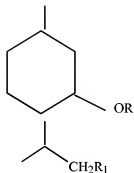
or

(2)



wherein  $R^1$  and  $R^2$  are independently hydrogen, or a linear or branched alkyl group having about 1 to about 5 carbon atom, or mixtures thereof;

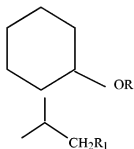
- or a cyclohexyl derivative according to the following general formula



wherein R represents -H, a  $C_1$ - $C_5$  linear or branched alkyl group, a  $C_1$ - $C_5$  alkenyl group, a  $C_1$ - $C_5$  alkoxy group or a  $C_1$ - $C_5$  acyloxy group,  $R_1$  represents -H, or a linear or branched alkyl group having from about 1 to about 5 carbon atoms, or mixtures thereof;

- or a mixture thereof.

16. The hygienic article according to claim 13, wherein the cooling agent is (a) menthol and/or peppermint oil in combination with (b) a second cooling agent typically selected from the group consisting of ketals, carboxamides, cyclohexyl derivatives with the exception of menthol, cyclohexanol derivatives and mixtures thereof.
17. The hygienic article according to claim 16, wherein the second cooling agent is a cyclohexyl derivative according to following formula:



wherein R represents -H, a C<sub>1</sub>-C<sub>5</sub> linear or branched alkyl group, a C<sub>1</sub>-C<sub>5</sub> alkenyl group, a C<sub>1</sub>-C<sub>5</sub> alkoxy group or a C<sub>1</sub>-C<sub>5</sub> acyloxy group, R<sub>1</sub> represents -H, or a linear or branched alkyl group having from about 1 to about 5 carbon atoms, with the exception of R and R<sub>1</sub> both being hydrogen, or mixtures thereof, and preferably is menthyl lactate, typically in a weight ratio of (a) to (b) from 1/1 to 1/100.

19. The hygienic article according to claim 10, wherein the cooling agent or a mixture thereof is present at a level of about 0.1% to about 99.9% and wherein the ester derivative or a mixture thereof is present at a level of from 99.9% to 0.1%, by weight of the total composition.
20. The hygienic article according to claim 10, wherein said composition is suitable for topical application to the external surface of a mammal in the form of a cream, lotion, emulsion, dispersion, gel, foam, oil, ointment or powder.

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#### EVIDENCE APPENDIX

None.

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#### RELATED PROCEEDINGS APPENDIX

None.